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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/194,286	11/23/1998	UWE BRIEM	P98.2706	3028

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EXAMINER	
ABELSON, RONALD B	

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 10/24/2003

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/194,286	BRIEM, UWE	
	Examiner	Art Unit	
	Ronald Abelson	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 August 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8,9 and 13-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *8,9,13-23 and 25* is/are allowed.

6)☒ Claim(s) *24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 October 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Allowable Subject Matter

1. The indicated allowability of claim 24 is withdrawn in view of the newly discovered reference(s) to Ramamurthy (US 5,675,384). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA), and further in view of Hayter (US 5,734,650) and Ramamurthy (US 5,675,384).

Regarding claim 24, the AAPA teaches a method for optimizing the utilization of connecting section systems (fig. 2) in which information is transmitted in data packets (spec: pg. 2 lines 19-23). The system provides for a scheduler (fig. 2

box S) and a queue identifier which is stored in a packet header (fig. 2 elements QID=1..N), pg. 2 lines 19 - 29).

The AAPA is silent on the transmission rate information being present in header and the use of two schedulers, one for peak cell rate and the other for sustainable.

Hayter teaches providing a first scheduler for scheduling transmission of data packets, which are representative of lower transmission rates (fig. 2 box 30), providing a queue identifier which is stored in the packet header, the queue identifier including information related to a transmission rate of an associated data packet (VCI/VPI, col. 3 lines 35-38, col. 3 line 51 - col. 4 line 2), and providing a second scheduler for scheduling the transmission of the data, wherein the corresponding connection parameters are representative of upper transmission rates (fig. 2 box 30).

In addition, Hayter teaches an input device (fig. 2 box 38, 42) which contains a table (fig. 2 box 46) that receives a data packet identifier (VCI/VPI field, delay value, col. 1 lines 23-31) and generates a control signal (fig. 2: Required Delay Dmax, Required Delay Dmin).

Hayter teaches the sustainable cell rate calendar preceding the peak cell rate calendar, while the applicant reverses the order of the two.

Although, in fig. 2, Hayter specifically teaches the sustainable cell rate calendar preceding the peak cell rate calendar, the inventor states that this is merely one example of the transmission rate control process covered by the invention (col. 4 lines 6-15). It would have been obvious to place the peak calendar in front of the sustainable calendar to determine if the user is exceeding the maximum allowable bandwidth as soon as possible.

Therefore it would have been obvious to one of ordinary skill in the art, having both AAPA and Hayter before him/her and with the teachings [a] as shown by AAPA, a method for optimizing the utilization of connecting section systems in which information is transmitted in data packets. The system provides for a scheduler and a queue identifier which is stored in a packet header, and [b] as shown by Hayter, providing a first scheduler for scheduling transmission of data packets, which are representative of lower transmission rates, providing a queue identifier which is stored in the packet header, the queue identifier including information related to a transmission rate of an associated data packet, and providing a second scheduler for scheduling the transmission of the data, wherein the corresponding connection parameters are representative of upper transmission rates, to be motivated to modify the system of AAPA

by replacing the single scheduler (fig. 2 box S) with two schedulers as taught by Hayter (fig. 2 box 30, 32). This would improve the system by allowing for both peak and cell rate scheduling.

The combination of AAPA and Hayter is silent on the current storage levels of the buffers controlling the schedulers.

Ramamurthy teaches the queue service rate is a function of queue level/congestion in a leaky bucket environment.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of AAPA and Hayter and Ramamurthy before him/her and with the teachings [a] as shown by the combination of AAPA and Hayter, a method for optimizing the utilization of connecting section systems in which information is transmitted in data packets by providing a first scheduler for scheduling transmission of data packets, and [b] as shown by Ramamurthy, the queue service rate is a function of queue level/congestion in a leaky bucket environment, to be motivated to modify the system of the combination of AAPA and Hayter by increasing the queue service rate as the queue level increase. This modification can be performed in software by monitoring the queue fullness levels. This would improve the system by preventing buffer overflow.

Allowable Subject Matter

4. Claims 8, 9, 13-23, and 25 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter.

Regarding independent claim 18, 21, and 25, nothing in the prior art of the record teaches or fairly suggests a method for transmission of data packets having a first scheduler for scheduling a lover transmission rate and a second scheduler for scheduling an upper transmission rate the steps of generating, by the second scheduler, an initial planning control signal that in part represents a scheduling of the second scheduler and setting the lower transmission rate of the particular connection by the first scheduler in response to the initial planning control signal generated by the second scheduler.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Ronald Abelson
Examiner
Art Unit 2666

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DANG TON
PRIMARY EXAMINER